



Goddard Procedural Requirements (GPR)

DIRECTIVE NO. GPR 4520.2F
EFFECTIVE DATE: March 5, 2010
EXPIRATION DATE: March 31, 2011

APPROVED BY Signature: Original Signed by
NAME: Edward J. Weiler
TITLE: Director

COMPLIANCE IS MANDATORY

Responsible Office: 270/Information and Logistics Management Division

Title: Receiving Inspection and Test

PREFACE

P.1 PURPOSE

This directive describes the process for performing and documenting receiving inspection and test for incoming products to the Goddard Space Flight Center (GSFC) in order to verify that specified requirements for the product are met. Requirements for in-process and final inspections and tests, and test status are described in GPR 5330.1.

P.2 APPLICABILITY

This directive shall apply to all incoming products covered by the scope of the GSFC Quality Management System (QMS).

P.3 AUTHORITY

[NPD 1280.1](#), NASA Management System Policy

P.4 REFERENCES

- a. [NPR 4200.1](#), Equipment Management
- b. GPR 1310.1, Customer Commitments and Review
- c. GPR 5100.1, Procurement
- d. GPR 5100.2, Supplier Performance Evaluations
- e. GPR 5310.4, Identification and Traceability of Products
- f. GPR 5330.1, Product Processing, Inspection, and Test
- g. GPR 5340.2, Control of Nonconformances
- h. GPR 8700.5, In-House Development and Maintenance of Software Products
- i. [DD Form 250](#), Material Inspection and Receiving Report
- j. NASA Form 1680, Evaluation of Performance
- k. GSFC Form 4-30, Work Order Authorization (WOA)
- l. [Training Module for GPR 4520.2](#), Receiving Inspection and Test
- m. [Training Module for GPR 5330.1](#), Product Processing, Inspection and Test

CHECK THE GSFC DIRECTIVES MANAGEMENT SYSTEM AT
<http://gdms.gsfc.nasa.gov> TO VERIFY THAT THIS IS THE CORRECT VERSION PRIOR TO USE.

P.5 CANCELLATION

GPG 4520.2D, Receiving Inspection and Test

P.6 SAFETY

Any special requirements for support or safety considerations (e.g., warning statements or notes, support equipment, personnel, facilities, or qualifications/licenses) associated with performing the receiving inspection and test events shall be recorded on the WOA, GSFC Form 4-30, when the receiving inspection instructions are prepared.

P.7 TRAINING

All personnel who will prepare receiving inspection instructions on a WOA or perform receiving inspection and test activities should be familiar with the training modules for GPR 4520.2 and GPR 5330.1. These training modules may be found at <http://arioch.gsfc.nasa.gov/iso9000/training/index.htm>.

P.8 RECORDS

Record Title	Record Custodian	Retention
GSFC Form 4-30, WOA or equivalent for application to software products	As defined in GPR 5330.1	As defined in GPR 5330.1
Inspection and Receiving Acceptance Document (e.g., DD Form 250)	As defined in GPR 5100.1	As defined in GPR 5100.1
Supplier Performance Records (e.g., NASA Form 1680 or the RITS database)	As defined in GPR 5100.2	As defined in GPR 5100.2
Problem Reporting/Problem Failure Reporting (PR/PFR) database	As defined in GPR 5340.2	As defined in GPR 5340.2

P.9 METRICS

Internal and external third party audits and evaluations shall be used to assess the effectiveness of this procedure.

P.10 DEFINITIONS

a. Acquisition – The activity of acquiring products. This activity includes, but is not limited to, the following methods of obtaining products: contracts, purchase orders, credit card buys, blanket purchase agreements, memorandums of agreement, and property transfers from organizations outside GSFC.

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- b. **Controlled Equipment** – All equipment with an acquisition cost of \$5,000 or more, that has an estimated service life of 2 years or more, which will not be consumed or expended in an experiment, and selected items of equipment with an acquisition cost less than \$5,000 that are designated, and identified as sensitive by the Center Supply and Equipment Management Officer. (See NPR 4200.1)
- c. **Product Design Lead (PDL)** – The manager or leader with overall responsibility for managing the product design activity.
- d. **Receiving Inspection** – The inspection performed on a product during initial receipt after it has been acquired in order to verify that specified requirements for the product have been met. As a minimum, a kind, count, and condition inspection shall be performed (Note: customer-supplied product only requires a count and condition inspection). Additional inspections and tests (e.g., dimensional testing) may also be performed as part of the receiving inspection process. Receiving inspection is not required for subsequent receipts of the product when it has been performed previously. For example, receiving inspection is not required for returning products that were temporarily located at off-site locations (although, there may be requirements for in-process inspection which are described in GPR 5330.1).
- e. **Receiving Inspection Instructions** – Documented instructions describing who performs receiving inspection and test activities, what these activities shall be, where they shall be performed, and what shall be considered acceptable. The instructions shall include any special handling or storage requirements applicable to the product. Receiving inspection instructions shall be documented (or referenced) on GSFC Form 4-30 or equivalent for application to software products.
- f. **Receiving Inspection and Test System (RITS)** – An optional-use Web-based system, maintained by the Information and Logistics Management Division (Code 270), which compiles a history of supplier performance (e.g., percent of products accepted and delivered on time) based upon the results of receiving inspection and test for each acquisition. Acquisition initiators and procurement personnel may use this system to check the performance history of a supplier prior to purchasing products. Acquisition initiators who wish to establish and document receiving inspection instructions on a WOA may use this system for that purpose and may also use the RITS database as the repository of their supplier performance records.

PROCEDURES

In this document, a requirement is identified by “shall,” a good practice by “should,” permission by “may” or “can,” expectation by “will,” and descriptive material by “is.”

1. OVERVIEW

1.1 All deliveries of incoming products covered by the scope of the GSFC QMS shall be processed through GSFC’s (Greenbelt and Wallops) Central Receiving operations in order to ensure that appropriate receiving inspection and test processes, as well as other related activities (e.g., security and equipment accountability processes), are followed. Delivery vehicles containing items that are impractical for offloading or performance of receiving inspection at Central Receiving (e.g.,

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oversize/bulk items or items requiring specialized handling) shall still report to Central Receiving in order to receive the proper clearance for delivery on Center.

1.2 A WOA documenting required receiving inspection and test events shall be created for the following GSFC products: flight products (spacecraft, instruments, balloons, and sounding rockets), including flight components, piece parts, and material; any item that directly interfaces with flight products; ground support equipment; ground stations; and inspection, measuring, and test equipment. WOA's documenting receiving inspection and test are not required for administrative supplies, documentation, services, or general tools unless required by the PDL. The PDL for "software" development activities may determine that the WOA is not applicable to his/her particular software related activities. When this is the case, receiving inspection and test requirements are determined in accordance with GPR 8700.5.

1.3 Use of a WOA for receiving inspection and test shall be required for the initial receipt of the product and is not required for subsequent receipts of the product when it has been performed previously (e.g., returns of products from launch sites, inspections or test activities, or returns of items out for rework/in-process development or on loan).

1.4 If supplier performance records will be created as a result of receiving inspection and test activities (in addition to the requirement for creating WOA's), they shall be created in accordance with GPR 5100.2. These records are only required for acquisitions \$100,000 or greater and are not required for acquisitions through intragovernmental agreements and other select organizations (e.g., Federal Prison Industries).

2. IMPLEMENTATION – An overall flowchart of the receiving inspection and test process is depicted in Figure 1.

2.1 For incoming products that require a WOA (see Section 1.2), the acquisition initiator shall prepare appropriate receiving inspection instructions on a WOA for each acquisition. Additionally, from applicable customer requirements (see GPR 1310.1), the PDL shall identify customer-supplied product (CSP) expected for delivery to GSFC and prepare receiving inspection instructions. If the customer provides specific incoming inspection/test requirements, these shall be incorporated into applicable receiving inspection instructions.

These instructions shall be prepared prior to processing the product through receiving inspection and test. Receiving inspection instructions should be prepared as soon as practicable after the acquisition information (e.g., supplier name and location, scheduled delivery date, and contract number or purchase order number, if applicable) has been obtained. Completion of the instructions in a timely manner will help preclude delays in processing the product once it has been received. There are several ways a WOA form may be obtained. The acquisition initiator shall choose one of the following methods:

- a. Complete the form online using RITS. Access this system at the following URL:
<http://rits.gsfc.nasa.gov>.

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This system maintains a database of all WOA's created in the RITS system, and allows WOA searches and copying of those existing WOA's. If a supplier performance record will be created in RITS, most of the data needed to create that record will not need to be reentered since the data from creating the WOA is already available.

b. Access the form on the Goddard Directives Management System (GDMS). The form may be found at the following URL: <http://gdms.gsfc.nasa.gov>.

The form may then be printed out and filled out manually or filled out on screen and printed. The WOA may also be saved locally on your computer.

c. Complete the form online using the WOA System. Access this system at the following URL: <http://goa.gsfc.nasa.gov>.

This system maintains a database of all WOA's created in the WOA System, and allows WOA searches and copying of those existing WOA's.

d. Locally generated WOA's may also be used as long as they have the information required by GPR 5330.1.

2.2 Receiving inspection instructions containing the following default receiving inspection/test event, at a minimum, shall be identified on the WOA for each acquisition:

a. Default event: "Perform kind, count, and condition inspection." [Note: customer-supplied product only requires a "count" and "condition" inspection.] These terms have the following meaning: kind – check for correct part number or configuration, count – check that the quantity delivered matches the quantity called for in the purchasing document, and condition – perform visual inspection to determine that the items have not been damaged.

b. The WOA allows the acquisition initiator to insert additional receiving inspection and test events as appropriate for the acquisition. Additional events should be considered under the following circumstances:

- (1) No product verification by GSFC or its agents is planned at the subcontractor's premises (see GPR 5100.1).
- (2) The terms of the procurement do not require objective evidence of product conformance to be provided to GSFC.
- (3) The subcontractor's or potential subcontractor's performance history warrants incoming product verification
- (4) Characteristics of incoming product are essential to mission success

c. If a supplier performance record will be created (e.g., in RITS or another appropriate system) an additional event may be added to help ensure completion of that activity. For example, "Update RITS with results of Receiving Inspection." For RITS, this event is accomplished by entering into the RITS database the following receiving inspection results and supplier information: quantity accepted, quantity

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rejected, actual delivery date, number of nonconformances reported in the PR/PFR database, and the supplier name and location.

d. Detailed instructions on how to complete a WOA are included with the GSFC Form 4-30 which is accessible through GDMS.

2.3 Upon receipt at GSFC, incoming products (both GSFC product and CSP) shall be appropriately identified on a WOA (or equivalent). The WOA, which reflects this identification, shall travel with the product. Additional information concerning identification and traceability of products is contained in GPR 5310.4.

2.4 Incoming products shall be processed in accordance with the receiving inspection instructions on the WOA. The completion of each event shall be annotated by the performing individual on the associated WOA. If the PDL requests that all or a portion of the items be released for production purposes prior to accomplishment of any receiving inspection or test identified in the receiving inspection instructions (also known as an “urgent release”), the product shall be identified and controlled as nonconforming product in accordance with GPR 5340.2.

2.5 If Central Receiving will be performing receiving inspections and tests on the incoming product (e.g., “Perform kind, count, and condition inspection”), they shall have access to the applicable WOA. If the WOA is not available, processing of the product will be delayed until the WOA has been created by the acquisition initiator.

2.6 When indicated in the applicable receiving inspection instructions, receiving inspection personnel shall record actual measurements and test results on the WOA as part of the receiving inspection record.

2.7 Nonconformances found during receiving inspection and test shall be documented in the PR/PFR database in accordance with GPR 5340.2. The resulting problem number shall be entered in the appropriate WOA block associated with the event where the problem was found.

2.8 If incoming GSFC products are controlled equipment that will not be processed through the equipment accountability function in Central Receiving (e.g., the items are oversized and will not be offloaded), the organization owning the equipment shall contact the Code 270 Information and Logistics Management Division equipment tagging operation so that the items can be properly identified and controlled in accordance with NPR 4200.1 (e.g., barcode-tagged and entered into the NASA Equipment Management System).

2.9 The acquisition initiator (or other designated individual) shall complete a supplier performance record in accordance with GPR 5100.2 (see Section 1.4).

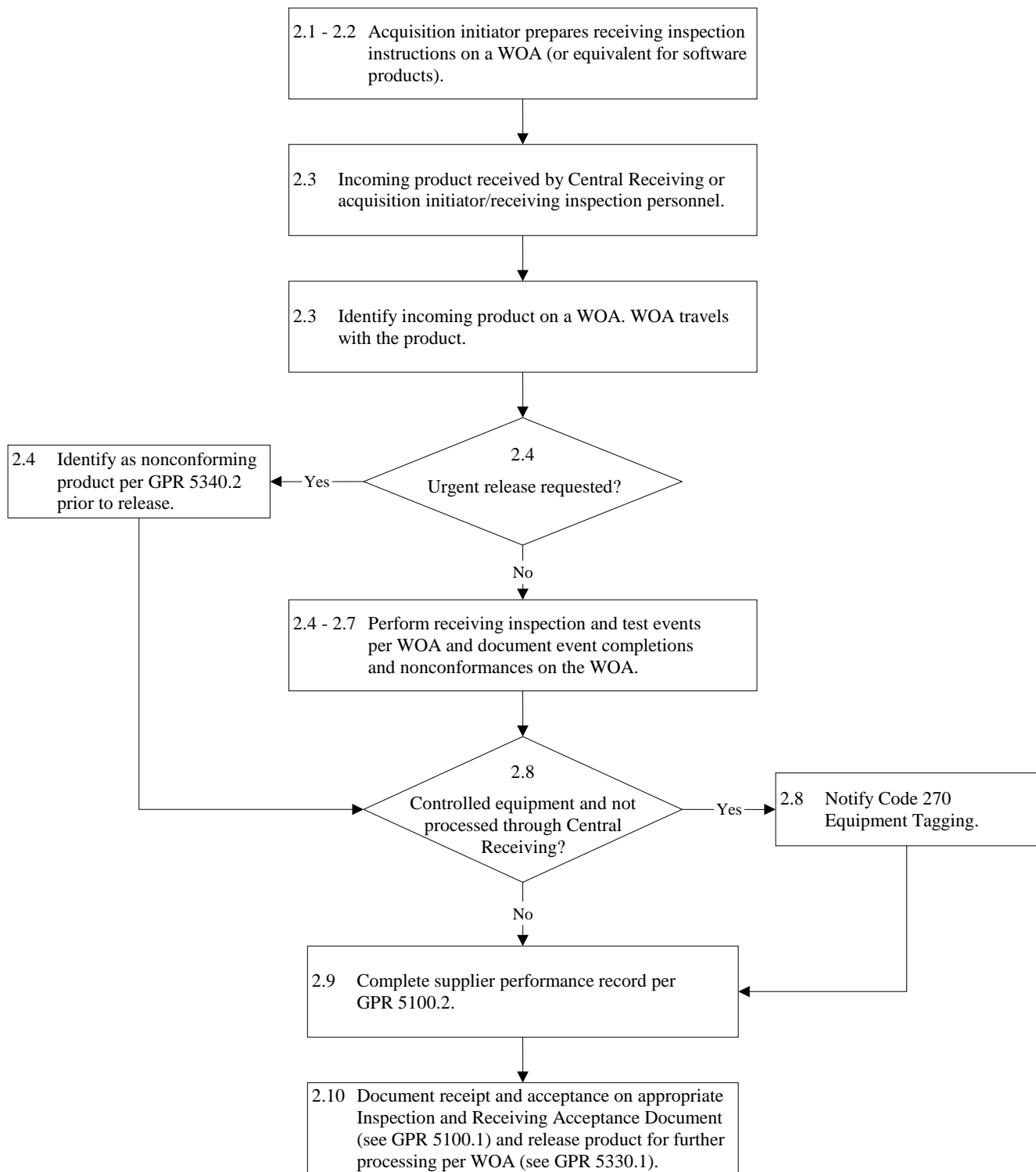
2.10 Receipt and acceptance for conforming product (or product dispositioned in accordance with GPR 5340.2) shall also be documented by the appropriate Inspection and Receiving Acceptance Document (e.g., DD Form 250 - see GPR 5100.1) and the product shall be released to the PDL for continued processing in accordance with WOA instructions established per GPR 5330.1.

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2.11 The annotated WOA shall be maintained as a record by the organization.

Figure 1: Receiving Inspection and Test Process



CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	08/12/98	Initial Release
A	10/6/98	<ul style="list-style-type: none"> Header and footer format changes. P.8 – Identified maintenance responsibility for quality records. 2.10 – Included requirement for further processing after receiving.
B	05/07/99	<ul style="list-style-type: none"> General revision to incorporate RITS. Incorporated format changes to comply with GPG 1410.1.
C	08/05/02	<ul style="list-style-type: none"> Changed directive title. General revision to replace references to RITS WOA with GSFC Form 4-30 to reflect the new process which does not make RITS mandatory for creating WOA's for receiving inspection and test activities. Incorporated format changes to comply with GPG 1410.1 (P.6 – Safety, P.7 – Training, and P.9 – Metrics). P.8 – Added the “Inspection and Receiving Acceptance Document” as a record and changed the retention period for the “RITS database supplier performance records.” P.9 – Added “percent of products accepted” and “percent of products delivered on time” as metrics. P.10 – Added definitions for “controlled equipment” and “receiving inspection.” 1.1 – Stated that all products covered by the scope of the GSFC QMS are required to be processed through GSFC's Central Receiving operation. 1.2 – Stated that inspection and test requirements for software products are determined in accordance with GPG 8700.5. 1.3 – Stated that using RITS is not required for subsequent receipts of the product. 2.1 – Included information on how to obtain a GSFC Form 4-30. 2.5 – Stated that processing of incoming product will be delayed in Central Receiving if the WOA is not available and needs to be created. 2.10 – Stated that receipt and acceptance for products shall also be documented with the appropriate Inspection and Receiving Acceptance Document in accordance with GPG 5100.1.
D	08/27/03	<ul style="list-style-type: none"> General revision to remove mandatory use of RITS. General revision to include the Problem Reporting/Problem Failure Reporting System as an additional mechanism to report nonconformances/problems. P.4, 1.4, and 2.9 – Added GPG 5100.2, Supplier Performance Evaluations. P.9 – Removed metrics.

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E	03/31/05	<ul style="list-style-type: none">• General revision to update directive names/numbers.• General revision to clarify requirements and remove ambiguity as part of the “GSFC Internal Rules Review.”• General revision to remove references to NCR’s and the NCR/CAS system.• P.9 – Included metrics.• P.10b – Updated controlled equipment threshold from \$1,000 to \$5,000.• P.10d, 2.1, 2.2a, 2.3 – Included requirements for customer-supplied product.• 2.1d – Added option for using locally generated WOA’s.
F	03/05/10	<ul style="list-style-type: none">• Administrative change: Change Code 230 Logistics Management Division to Code 270 Information and Logistics Management Division.• Administratively extended for 1 year from original expiration date.